

NOTES ON SOME HEBRIDAE FROM THE UNITED STATES WITH  
THE DESCRIPTION OF A NEW SPECIES

(HEMIPTERA)

JOHN T. POLHEMUS<sup>1</sup> and HAROLD C. CHAPMAN<sup>2</sup>

The present paper includes notes on several species of *Hebrus* and a description of a new species. All material is contained in the collections of the authors.

***Hebrus piercei* Porter**

This species, known heretofore from New Mexico, Arizona and Texas has now been found in Colorado and Nevada. These insects were found in the gravel along the runoff streamlet of Poncha Hot Springs, Colorado, where the water was still warm, and on an overhanging bank of a hot spring runoff at Warm Springs, Nevada. The male paramere agrees rather well with that depicted by Porter (1952A).

NEVADA: 17♂♂, 15♀♀, Warm Springs, Nye Co., C.L. 268, II-20-1964, J. T. Polhemus.

COLORADO: 3♂♂, 4♀♀, Poncha Springs, C.L. 151, VIII-19-1962, J. T. Polhemus.

***Hebrus amnicus* Drake and Chapman**

This hebrid, originally collected in Georgia and heretofore known only from there, has now been found in Indiana. The male parameres agree well with the figure given by Drake and Chapman (1958).

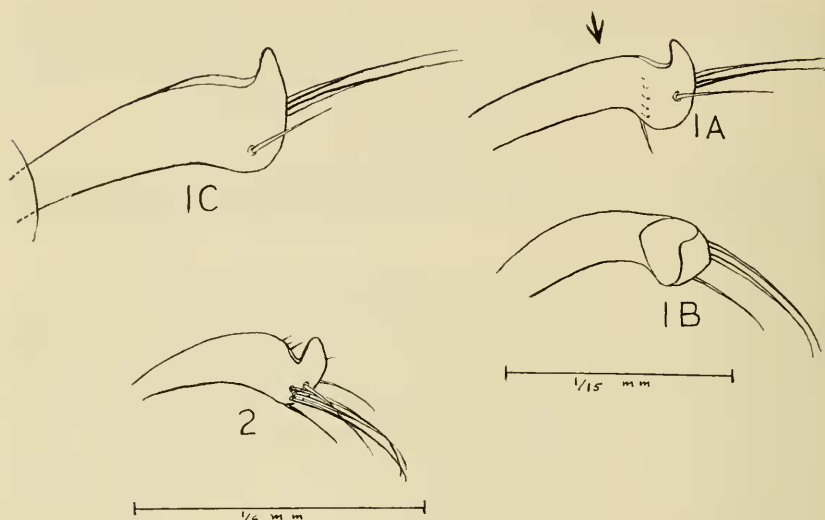
INDIANA: 5♂♂, 5♀♀, Monroe Co., II-23-1961, J. C. Schaffner. Under stone-out of water near stream.

***Hebrus hubbardi* Porter**

So far as is known, *Hebrus hubbardi* Porter was represented only by the type series of five specimens until the authors made the captures listed below. The male parameres vary slightly from the figure given by Porter (1952B), and have been re-figured (fig. 2). The shape of the parameres match well with Porter's figure, and all other characters match his description. Apparently the paramere figured by Porter is a left paramere, as on the right paramere figured there are about eight short hairs on the far side. The setae on the parameres of our specimens differ in length from those depicted by Porter although the placement is similar. The paramere figured is from a specimen taken at the type location, Palm Springs, Calif.

<sup>1</sup> 3115 S. York, Englewood, Colorado.

<sup>2</sup> Entomology Research Division, Agri. Res. Serv., U.S.D.A., Lake Charles, Louisiana.



Right Male parameres. Fig. 1: *Hebrus obscura* n. sp. A. paratype, Forestdale, Arizona; B. Same, top view; C. atypical paramere, paratype, Palm Springs, Calif. Fig. 2: *Hebrus hubbardi* Porter, specimen from Palm Springs, California.

ARIZONA: 1♀, Aravaipa Canyon, Graham Co., Col. Loc. 315, X-8-1964, J. T. Polhemus.

CALIFORNIA: 11♂♂, 8♀♀, Banner, San Diego Co., XII-4-1963, H. C. Chapman, banks of slowly moving stream in wooded area; 1♂, 4♀♀, Palm Springs, Riverside Co., XII-3-1963, H. C. Chapman, at oasis.

#### *Hebrus obscura*, n. sp.

BRACHYPTEROUS FORM: Male: Small, dark, with head, pronotum and scutellum fuscous; dorsal surface of abdomen piceous, becoming blackish brown on connexiva, with broad shining area medially on segments 5, 6 and 7; body beneath light fuscous to fuscous, shining black on abdomen, thickly clothed with short grayish hairs; buccula, legs and antenna testaceous; eyes roughly faceted; small, reddish brown. Head, pronotum, connexivum, and wings along sides with very fine, recumbent golden hairs; legs and antenna clothed with short pale hairs, and scattered longer hairs on distal three antennal segments. Rostrum long, testaceous, extending onto base of abdomen; sulcus deep, not interrupted between hind coxae. Antennae moderately long; Segments I and II stout; III, IV and V slender; Measurements—I, 10; II, 7; III, 12; IV, 7; V, 12 (60 units equal one millimeter). Head with median sulcus on vertex; ocelli small. Pronotum about twice as wide across humeral angles than median length (36:19); strongly constricted between the lobes, with three large pits in the shallow transverse sulcus between the lobes; anterior lobe much narrower (28:36) and shorter (8:11) than posterior lobe, with a row of fairly large pits encircling the

pronotum just behind the collar; hind lobe sharply narrowed anteriorly in front of humeral angles, the humeral angles slightly raised and impressed within; central portion of posterior lobe broadly raised, with coarse, dark, shallow depressions medially, these depressions extending toward the humeri posteriorly. Scutellum with the large deeply impressed basal portion divided by a median carina, edges raised, apex broadly truncate, bifid, more than twice as broad as long (19:8). Hemelytra short, not more than three times as long as scutellum; clavus with small light area on basal portion, white on some specimens; remainder of hemelytra brownish, membrane becoming lighter at apex. Genital capsule of male rather small; parameres very tiny (fig. 1).

Length, 1.47 mm; width 0.60 mm.

Female: Very similar to male, except slightly larger; dorsal surface of abdomen lighter than in male, being orange brown over the medial area of segments 2, 3 and 4; darkest on segment 4.

Length: 1.53 mm; width, 0.63 mm.

*Material:* Holotype ( $\delta$ ), and Allotype ( $\varnothing$ ), Forestdale, Arizona, IV-15-1965, J. T. Polhemus.

Paratypes as follows: 11  $\delta$   $\delta$ , 7  $\varnothing$   $\varnothing$ , Forestdale, Arizona, C.L. 316, IV-15-1965, J. T. Polhemus; 10  $\delta$   $\delta$ , 9  $\varnothing$   $\varnothing$ , Palm Springs, California, XII-4-1963, H. C. Chapman; 2  $\varnothing$   $\varnothing$ , Banner, California, XII-3-1963, H. C. Chapman; 19  $\delta$   $\delta$ , 12  $\varnothing$   $\varnothing$ , Aravaipa, Arizona, C.L. 315, X-8-1964, J. T. Polhemus.

The Palm Springs, California, specimens were taken at a canyon oasis, while the Banner, California, material was collected along the banks of a slow moving stream in a wooded area. In Arizona, the Forestdale specimens were taken along a tiny spring fed stream, mostly by tearing apart a rotten piece of wood at the water's edge, and they were found in Aravaipa Canyon in the moss and damp earth on a shaded vertical cliff where water was continually seeping.

The holotype and allotype will be sent to the U.S. National Museum; paratypes will be distributed to various collections. This hebrid can be separated from its congeners by its small size and the male parameres. The macropterous form is unknown.

#### REFERENCES

- Drake, C. J., and Chapman, H. C. 1958. New Neotropical Hebridae, including a catalogue of the American Species (Hemiptera). Wash. Acad. Sci. 48(10): 317-326.
- Porter, T. W. 1952A. A New Species of Hebridae (Hemiptera) from the Southwest. J. Kans. Ent. Soc. 25(4): 147-149.
- . 1952B. Three New Species of Hebridae (Hemiptera) from the Western Hemisphere. J. Kans. Ent. Soc. 25(1): 9-12.